

REMARKS

Priority

With regard to Applicant's claim for foreign priority, Applicant wishes to point out that the International Bureau received the priority document on March 10, 2006, as evidenced by the attached copy of Form PCT/IB/304. It is expected that this satisfies the requirement.

Claim Rejections

Applicant has amended the claims such that the phrase "having a molecular weight distribution (Weight average molecular weight (Mw) / Number average molecular weight (Mn) of 3.0-5.0" has been deleted from claim 2 and incorporated into claim 1.

In the Office Action, the Examiner rejected the pending claims as being unpatentable over Japanese Patent Publication No. 2005-008817 (Okamoto) and United States Patent Application Publication No. 2003/0125450 (Fujisawa). However, neither Okamoto nor Fujisawa disclose use of a polybutadiene composted of (a) a boiled n-hexane insoluble fraction and (b) a boiled n-hexane soluble fraction having a molecular weight distribution (Mw) / (Mn) of 3.0-5.0.

Okamoto discloses a molecular weight distribution. However, the range of the molecular weight distribution is from 2.0 to 2.8. Further, Okamoto discloses that "if the range is less than 2.0, workability would worsen. On the other hand, if the range is over 2.8, rebound resilience would worsen".

Fujisawa discloses a molecular weight distribution in the range of 3.0 to 6.0. However, the molecular weight distribution relates to a base rubber which does not include (a) the boiled n-hexane insoluble fraction of the present invention. That is, Fujisawa does not disclose the base

rubber including two kinds of fraction.

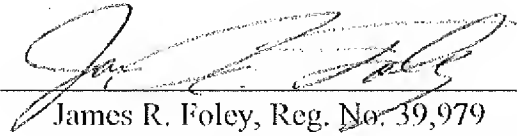
Fujisawa discloses the molecular weight distribution, but the polybutadiene rubber of the present invention requires not only a molecular weight distribution but also two kinds of fraction. The polybutadiene rubber of the present invention is composed of 1-9 weight % of a boiled n-hexane insoluble fraction and 99-91 weight % of a boiled n-hexane soluble fraction. The proportion of the boiled n-hexane insoluble fraction less than the previously mentioned range causes a problem because it worsens the processability. In contrast, the proportion more than the previously mentioned range is undesirable because it may increase the mixture viscosity and worsen the processability. As shown in tables 1 and 2 of the present specification, it is clear that both fractions (a) and (b) are needed to obtain good processability and so on. This advantage is unexpected because Okamoto discloses a different range of the molecular weight distribution from the present invention and Fujisawa does not disclose the base rubber including two kinds of fraction even though it does disclose the molecular weight distribution. Thus, Applicant believes that the present invention would not be obvious from Okamoto and Fujisawa.

In view of the above amendments and remarks, Applicant respectfully submits that the claims of the present application should be allowed. Should the present claims not be deemed adequate to effectively define the patentable subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

Dated: June 22, 2010

By:



James R. Foley, Reg. No. 39,979
Trexler, Bushnell, Giangiorgi,
Blackstone & Marr, Ltd.
105 W. Adams Street, 36th Floor
Chicago, Illinois 60603
(312) 704-1890

AP0885.WPD